

Claims

1. Cooling device comprising a cooling unit (10) through which a fluid to be cooled, in particular hydraulic oil, can flow, the unit having a device housing (18) and at least one filter unit (12) for filtration of the fluid, characterized in that the device housing (18) of the cooling unit (10) has at least one overhanging support arm (14), via which the respective filter unit (12) is connected to the cooling unit (10) to carry fluid.
2. The cooling device as claimed in claim 1, wherein the overhanging support arm (14) is provided with a cover part (42) via which the filter housing (32) with at least one filter element (30) as the respective filter unit (12) can be connected to the cooling unit (10) to carry fluid.
3. The cooling device as claimed in claim 1 or 2, wherein the cooling unit (10) is made as a plate-shaped finned radiator and the filter unit (12) is located in the direction of flow of the fluid downstream from the cooling unit (10).
4. The cooling device as claimed in claim 3, wherein the filter unit (12) held by the overhanging support arm (14) extends along the longitudinal side of the finned radiator.
5. The cooling device as claimed in claim 3 or 4, wherein the cooling unit (10) is composed of sheet metal parts such that a box-shaped structure results, with two longitudinal sides, two transverse sides and one front and one rear side and wherein a fan blower (46) is integrated into the front side.
6. The cooling device as claimed in claim 4 or 5, wherein the two longitudinal sides of the cooling unit (10) are formed from two longitudinal shafts (24, 26), and wherein in one

longitudinal shaft (24) at least one replenishment and check valve (45) is integrated and in the other a thermobypass valve (58).

7. A cooling device as claimed in claim 6, wherein in the respective longitudinal shaft (24, 26) there are fluid connection sites (64, 68, 70), and additionally or alternatively one connection site (66) for measurement units, especially for temperature detection.
8. The cooling device as claimed in claim 6 or 7, wherein in the longitudinal shaft (24) with the combined replenishment and check valve (48) there is another check valve (56) which opens in the direction of the tank (T).
9. The cooling device as claimed in one of claims 6 to 8, wherein the longitudinal shaft (24) to which the support arm (14) is connected has two fluid guides, wherein one fluid guide is used for discharge (34) of filtered fluid and the other fluid guide is used for supply (28) of unfiltered fluid coming from the cooling unit (10), and wherein one fluid guide encompasses the other or is located running laterally next to it.
10. The cooling device as claimed in one of claims 2 to 9, wherein the cover part (42) is provided along a retaining ring with an inside thread (40) via which the pot-like filter housing (32) with an outside thread (38) on its edge-side opening region can be screwed into the cover part (42).
11. The cooling device as claimed in one of claims 2 to 9, wherein the cover part (42) on its free top surface is provided with a fouling indicator (44).